

# A Review on the Potentiality of Derivative Market and Economic Stability of Bangladesh

Md. Edrich Molla

## Abstract:

This study uncovers the different prospects of derivative market in Bangladesh. Economic stability can be achieved through derivative market in Bangladesh. Due to instable economic conditions and restricted environment, corporate sector has reflected insignificant contribution in equity or bond markets in Bangladesh. Rapid infrastructure development, political stability, effective governance, experience and awareness of market participants are the key factors that may lead to build a strong derivative market in Bangladesh. Hence, literature is reviewed and analyzed due to unavailability of appropriate data for this study. Findings of the study have suggested that derivatives are an effective risk mitigating tool on one hand whereas on the other side, highly speculative activities in derivative market may be harmful for the financial markets and economic growth. In Bangladesh perspective, all the players of financial market will have to adopt adequate risk mitigating strategies to avoid any adverse market scenario. Speculative activities must be highly restricted due to economic instability as Bangladesh is not in a position to absorb any financial shocks or crisis. The main regulatory authority of this particular market will be Bangladesh Bank (BB) and Bangladesh Security and Exchange Commission (BSEC) though this kind of market is not introduced yet in Bangladesh. The regulators will keenly observe market and take necessary actions to prevent any adverse conditions.



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## 1. INTRODUCTION

Derivatives are the financial instruments and value of the same is derived from the value of underlying asset at a particular point of time. Many developed countries use these instruments to reduce market risks. Common types of derivatives are future, forward and options. Developed economies are heavily relying on their financial markets. Growth of financial market has positive relationship with economic growth. Financial markets of developed economies are using derivative tools to minimize the risk of market participants. However in developing economies the situation is adverse because of volatile environment. The most important issue of developing economies is to bring hedging products in their markets to attract investors. In case of Bangladesh, the economy has seen severe ups and downs. If the economy of Bangladesh is compared to the economies of other developing nations, we can observe that Bangladesh has been able to sustain solid growth. There are many reasons behind this growth. However, some important ones are: i) Consistent economic policies, ii) Political stability, iii) Effective governance, iv) Internal stakeholders' participation etc. Over the last 10 to 15 years many developing countries strengthen their financial markets to achieve sustainable growth. The prominent financial market participants in Bangladesh are the stock markets, non-banking financial institutions and banking institutions. Products related to equity derivatives were not initiated yet in the Dhaka Stock Exchange or Chittagong Stock Exchange. Primarily, Non-Banking Financial Institutions and Mutual Funds may be involved trading in derivatives market. BB and BSEC will be the ultimate authority to supervise these participants and banks engaged in derivative transactions. Derivative transactions those will be allowed in future under BB and BSEC regulations include: i) Foreign currency options, ii) Forward rate agreements, iii) Interest Rate swaps. Various developing economies used derivatives to develop their financial markets for improving their economic conditions. In case of Bangladesh, the situation is more critical due to economic instability, lack of investment, decline in net foreign assets and increase in domestic and foreign loans. All these factors will be influencing the growth of derivative market in Bangladesh. Different products will be offered by the stock exchanges of Bangladesh. These may be: **Ready Market** is a conventional stock market i.e. also known as the usual market where sellers and buyers come to trade shares. **Cash Settled Futures** are standardized contracts, to buy or sell a specific underlying instrument on a specific date in future, at an agreed price. All settlements are executed in cash with in 30, 60 and 90 days from the date of the contract purchased. **Stock Index Futures** are another product that is traded in stock exchanges. Each contract is to buy or sell a fixed value of the index. These contracts are settled in 90 days from the date of the contract. **Deliverable Futures** are the forward contracts to buy or sell specific underlying instruments with actual delivery of underlying instrument. These are settled within 30 days after the contract is purchased. Economic instability in Bangladesh is the major challenge in growth of derivative market. This paper discusses that how the economic stability can be achieved through derivative market and identifies factors which influence more in development of derivative market in Bangladesh. As a developing economy, financial market in Bangladesh comes across with various problems. These problems are tried to be discussed in this paper. This study is aimed to help understand the relationship of economic growth and derivative market in Bangladesh.

## 2. RESEARCH GAP

This study focuses on the potentiality of derivative market and economic stability of Bangladesh. Researcher experienced while conducting this study that there is limited researches have been conducted in this field as there is insignificant physical evidence of

derivative markets in this country but it is a significant area to study. For investors and government require more study and more information on this field how this market may be formed and contribute to economic stability. Investors will seek authentic relevant information on economic stability and derivative market of Bangladesh to participate in this market. On the other hand, government will require understanding the reasons how the economic stability can be achieved through a strong derivative market. Therefore, this study will help to understand both investors and government on the potentiality derivative market that can play a vital role to stabilize economic growth of Bangladesh.

### 3. LITERATURE REVIEW

The financial literature is quite rich related to risk reducing products and macroeconomic conditions of Bangladesh. However, few studies have been conducted with respect to the impact on the potentiality of derivative market and economic stability of Bangladesh. Hence, a literature gap still exists there. Now, empirical studies conducted in the above mentioned area are being briefly reviewed as follows.

Earlier studies have shown positive relationship in equity market and economic growth of developing countries. However results of the research executed that did not provide evidences in support of earlier studies and theories. They are of the opinion that liberalization of equity market does not result in the growth. However, if such a situation is apparently reflecting then it may be through an indirect channel that has not been addressed in the earlier studies. **Bujari, A. A. et al. (2016)** analyzed the effects of structural changes as a result of political instability on the Karachi Stock Exchange. They have suggested a better law and order situation and significant policy changes for improvement in capital market. **Calistru, R. A. (2012)** showed that the growth of derivatives market has been observed in all related areas including exchange traded, over the counter, currency, commodity, interest rate equity and credit. Derivatives are very useful instruments in mitigating risk and are highly leveraged too. This leverage attracts the speculators and may cause unfavorable movements in price. Combination of leverage and volatility in these instruments require investors and policy makers to have a quite clear understanding for the same. **Calistru, R. A. et al. (2011)** studied that derivative markets seemed to have grown in developing economics due to the increased financial and economic risks. Derivatives add development of these emerging economies through better management of these risks. **Gautam, I. et al. (2016)** mentioned research areas that are ready to be explored. They state that the condition in the developed economies like USA is more aligned with the theories as these are the most efficient markets of the world. However, the task is challenging while doing the same for developing economies. **Gürkaynak R. S., et al. (2005)** have covered six major economies of the world including the European Union, Japan, India, China, Brazil and the United States to examine the relationship between derivatives (independent variable) and the growth of economies (dependent variable). Analysis was based on the data collected for fourteen years and positive relationship was found between dependent and independent variable. **Khān, M. (2013)** analyzed the use of derivatives for transferring capital towards developing economies. Moreover, redistribution of risks is also studied in detail to help reduce the influence of disturbances in financial sector on the whole economy. **Kim, Y. K. et al. (2015)** studied the influence of financial derivatives on the real economy during the period from 1986 to 2012. Over the counter as well as the exchange traded derivatives observed to be the vital factor in enhancing unemployment. However, both were found to play positive role in reducing inflation. However, they have mentioned the need of further research to verify the

results of the study. **Lazový, J. et al. (2014)** made an attempt to discuss the development and future of the derivative Market in India. They have also reflected the present state of derivative market in India respective to this global era. Objective of these attempts is to enhance the trust of Investors on the capital market of India. They have suggested the participation of government agencies to address problems prevailing in the derivative market. **McLean, R. D. et al. (2017)** have studied the influence of derivative trading on price discovery in India. They have found that extensive work has not been done in this area. **Mishra, B. et al.** explained that derivatives help to improve the flow of capital by locking in asset prices and mitigating credit risks. Derivatives became famous after 1970 and growth in the variety of instruments made them complex too in the recent era. They have brought innovative changes in the financial world. **Pirrong, C. (2009)** studied the factors following the success of derivatives in developing Asian economies. Findings of the study revealed that spot market volatility, size of the underlying spot market and the market liquidity have significant positive effects on the trading volume of derivatives. Besides, Options are more successful relative to the Futures in terms of trading volume that may be due to the associated costs with the margin requirements. Derivatives are the recent observable fact in India. Hence, **Rahman, S. et al. (2011)** examined the contribution of derivatives in economic development. The result of study revealed that Derivatives provide support for the effective risk allocation. They are helpful in utilizing investment opportunities for firms as well as the individuals. Derivatives also help in market stability by making the investors and participants more informed. **Rasul, M. S. (2013)** examined the derive market after the financial stress with the discussion from various stakeholders of Milken Institute. During the crisis and its outcomes, over the counter derivatives specifically credit derivatives condemned to be a cause of counterparty risk that required substantial change in regulations. They have observed significant differences of the effects of these derivatives pre and post crisis period. **Saroha, P. et al.** discussed the impact of derivatives on market functioning during normal and crisis conditions. During normal conditions, derivatives help support reducing risk and improving market liquidity whereas under the condition of stress and crisis, they cause increase uncertainties in valuation. Nevertheless, most of the economists have not paid required attention towards the same at macro level that is required to be addressed. **Shiller, R. J. (2008)** discussed the complexity of derivative instruments in relation with developing and developed economies. He concluded that derivative instruments have become more refined in their type and application. As per the study, concentration was observed towards Financial Derivatives. Moreover, exchange traded derivatives seemed to be preferred relative to the ones being traded Over the Counter (OTC). Derives were not only found to be the hedging strategy only rather supported for the growth of Capital Markets. **Sill, K. (1997)** claimed that market-based measures of expectations are similar to survey-based forecasts although the Market-based measures somehow provides more accurate predictions of the responses of financial market to data surprises as compared to the survey-based forecasts. Little evidence was found for the role of risk to drive a block between prices and probabilities in the market. **Stout, L. A. (1995)** prescribed that besides banks and financial institutions to reduce credit risk, credit derivatives were also used by the speculators to make money. Use of the credit derivatives for speculative purposes caused increase OTC trading and financial instability. Hence, a most comprehensive system for the use of credit derivatives should be designed to enhance their positive usages and related outcomes. **Sundaram, R. K. (2012)** studied the trading of derivatives and its impact on the economic growth & volatility in the economies of African countries. Though, local trading of derivatives has not proved to have a significant impact on economic growth. However, they have suggested further research in this

area. However many economists and financial experts has researched the impact of derivatives on macroeconomic environment and conclude that it works in normal economic situation. In times of stress derivatives create an adverse impact on financial markets.

#### 4. OBJECTIVE OF THE STUDY

The primary objective of this empirical study is to show the potentiality of derivative market and economic stability of Bangladesh. To some extent, the specific objectives are: (a) To find out the necessity of derivative market in Bangladesh, (b) To relate derivative market and economic stability, (c) To examine current activities taken to form derivative market in Bangladesh, (d) To show major challenges of establishing and operating derivative market (e) To recommend some points for mobilizing derivative market and economic stability of Bangladesh in the future.

#### 5. METHODOLOGY

This study is based on collection and analysis of secondary data through the review of earlier studies in this context because there is insufficient data availability regarding the derivative market of Bangladesh. The main sources of this study are websites and publications of BB, BSEC, DSE and CSE. Furthermore, related literature is also reviewed to fulfill the objectives of this study. In addition, to understand the current scenario of Bangladesh derivative market, interviews have been conducted with the officials of BB, BSEC, commercial banks, non-banking financial institutions and finally general investors.

#### 6. DISCUSSION AND ANALYSIS

Derivatives are complex financial instruments which have used in developed markets for risk management. However in developing economies like Bangladesh derivative markets are not still introduced. Capital market of any country provides a base of economic growth. If a country's economy has been growing than the financial institutions of this economy also strengthen and play a positive role to accelerate economic growth. The primary role of capital market is to provide a place in the economy where longer term loan able funds may be available. The derivative market in Bangladesh is not yet physically established and is currently introducing single stock deliverable futures. Later on, various other derivative instruments are trying to introduce in Bangladesh equity market. Derivatives are the financial innovation and many emerging economies use it to reduce risk and provide safeguard to their investors. Market participants in derivative markets are taking highly speculative positions to transfer their risk. Bangladesh's equity market has seen many ups and downs in recent past years which restricted the investors as well as regulatory authorities. Some of these changes have occurred due to political and economic instability and some due to bad governance and less awareness about the market risks and financial products. The market participants are taking speculative positions which create more volatility; in addition economies like Bangladesh can't afford these types of speculations. Regulatory authorities has played an important role in this scenario BSEC formulated the rules and regulations regarding risk aversion products, as well as the formation of CDBL is a great success to regulate the derivative market of Bangladesh. Furthermore BSEC also working on introduce new financial products in the market to improve country's economic conditions and it is proved that Stock exchanges are the parameter which uses to measure economic growth of a country. A well performed stock exchange with diversified portfolio opportunities attracts the investors as well. In Bangladesh's case regulatory bodies of stock market and commodity market played a

significant role to improve risk reducing products and facilitate market participant too. The stock exchanges also failed to attract the foreign investors in Bangladesh.

It can be measured the economic growth of the country with economic activities perform in a certain period, however in case of Bangladesh the GDP growth rate was increasing during 2008 to 2018. In 2008 the GDP was 6.19%, in 2009 was 5.05%, in 2010 5.57%, in 2011 6.46%, in 2012 was 6.52% consistently in 2018 it was 7.5%. The increasing trend in GDP has been caused due to political stability, fiscal growth, and government viable policies and international markets and trade balance. It has seen the consequences of these potentialities on stock exchange as well; from 2008 to 2018 the numbers of new listed companies are increasing rapidly. Increase in FDI indicates the attraction of foreign investors in Bangladesh.

Figure- 1 (Bar-chart 1): Growth of Bangladesh: 2008 to 2018



Source: Tradingeconomics.com: Bangladesh Bank

It is observed that financial experts and bankers have a consensus on Bangladesh derivative market is a vital market with lots of potentialities such as consistent policies, stable law and order situation, increasing educated market participants, and political stability. All these factors contribute to strong economic conditions of Bangladesh. However under this certain and encouraging conditions financial sector of Bangladesh work efficiently. Financial experts and bankers agreed on the significant role of country's central bank (BB) and BSEC are playing a great role to control the financial sector of Bangladesh. Additionally, the country like Bangladesh is ready to expand their derivative market due to internal investment and external investment. Currently BB and BSEC have been trying to frame a physical derivative market in Bangladesh. All these stakeholders are working in highly controlled derivative market as per BB instructions and back to back hedge the derivative transaction is necessary to reduce their risk. Institutions will be strictly prohibited to participate in speculative activities. The main problem of derivatives transaction is liquidity, in this regard BB will restrict the banks to maintain minimum paid capital requirements and BASEL 3 will introduce near future. Furthermore, those economic grounds of Bangladesh are sound, low rate of inflation, low speculative environment and sufficient of professional knowledge are the key factors for growth of domestic market. In this regard BB takes corrective measures on regular basis to prevent financial sector as well as economic breakdown. The derivative market is comprised of 70% of the total trading volume in India. Whereas, it is taken a primary step contributing to the total trading volume in Bangladesh if it is established derivative market in this country. Majority of the investors in this market may be individuals and small investors whereas participation of institutional investors, banks, NBFIs and other

companies. Single stock deliverable futures will be remained the famous instrument. Other instruments like cash settled futures and index futures will be traded minimally in Bangladesh Derivative market. It can be explained that Bangladesh is the only emerging market for which growth has greatly increased recent years. There will be many economic advantages of using derivatives. Derivatives are effective risk mitigating tool. Future price discovery, increase the savings and investment in long run and provide investment opportunities are the benefits to use derivatives. However, it has also some drawbacks which are increase in volatility, rises new risks, increase in speculative positions and can leads the financial crisis. Sometimes the future prices affect the spot market prices and if the prices will change at the time of exposure than will result market disruption. Similarly if any participant in the market will default than the entire participant of the market will have paid the cost. Many economist and institution have agreed on that the major cause of financial crisis of 2010-11 was exponential derivative growth. This financial crisis had affected Bangladesh capital markets directly due to highly volatile environment.

## 7. CONCLUSION

In developed economies these derivative products are commonly used as well as many emerging economies also using it to reduce their risk. In Bangladesh derivative market has been forming due to political and economic stability, fiscal and trade favorable balance, strong market infrastructure, and experienced and educated market participants. Derivatives are complex financial products which are being used to reduce risk. Derivatives have many economic benefits which are future price discovery, low cost, high leverage, and less market volatility. Bangladesh derivative market is being started near future with high level of potentiality. Financial institutions participation will be a big numbers in derivative market. Economic conditions of the country are the main strength in derivative market growth. Remembering that developing economies may have faced many economic problems due to these regulatory authorities like central banks will have taken the secure positions and feared to enter in derivative contracts. Many economists have agreed on that, the global financial crisis mainly caused by derivative products. Though the financial crunch of 2010 has directly affected Bangladeshi markets due to crisis of stock market crash, Bangladesh is consistently keeping its growth upward. Study findings suggest that derivative market definitely help in economic growth of Bangladesh if properly engaged and properly documented. However it also creates new risks in developing economies. This study concludes that economic stability is the main key to growth of forming derivative market in Bangladesh. As a policy indication it suggests that: i) BB and BSEC should make necessary arrangements to educate participants about these complex instruments because the derivative market in Bangladesh has a great potential but highly speculative activities may be harmful, ii) BSEC should improve the market infrastructure and facilitate investor to be comfortable with this market iii) BSEC should also work on increase FDI to attract derivatives, iv) Market should be highly regulated to prevent undesired result and insatiability.

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